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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/682,331	08/21/2001	Guido Gentner	112740-278	6792

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EXAMINER	
BELLO, AGUSTIN	

ART UNIT	PAPER NUMBER
2613	

DATE MAILED: 05/02/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/682,331	GENTNER ET AL.	
	Examiner	Art Unit	
	Agustin Bello	2613	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *28 November 2005*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-4,6-11 and 13-18* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-4,6-11 and 13-18* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 11/28/05 has been entered.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1-4, 6-11, and 13-18 are rejected under 35 U.S.C. 102(e) as being anticipated by Sugiya (U.S. Patent No. 5,664,131).

Regarding claim 1, Sugiya teaches providing at least two control units (reference numerals 154, 156 in Figure 11) which operate at different speeds to influence tilting of a spectrum of data signals in the optical data transmission path; measuring a change in overall power in the optical data transmission path via at least one quicker control unit (reference numeral 128, 150, 154, 156 in Figure 11) of the at least two control unit, the quicker control unit being connected to at least one filling light source (reference numeral 16 in Figure 11) for pumping a transmission fiber; compensating the tilting quickly by changing the power of the at

least one filling light source (reference numeral 16 in Figure 11), then returning the power of the at least one filling light source slowly in the direction of the original state using at least one slower operating control unit (reference numerals 146, 152, 154, 156 in Figure 11) of the at least two control units.

Regarding claims 2 and 10, Sugiya teaches incorporating a time delay (e.g. the fiber between reference numerals 127, 14 in Figure 11) in the signal in the optical data transmission path between measurement of the overall power and injection of the at least one filling light source.

Regarding claim 3, Sugiya teaches providing a controllable filter (reference numeral 131, 133, 135, 137 in Figure 11), wherein the influencing of the tilting of the spectrum is additionally performed by the controllable filter.

Regarding claim 4, Sugiya teaches a power-controlled EDFA (reference numeral 130, 132, 134, 136, 138 in Figure 11), wherein the influencing of the tilting of the spectrum is at least additionally performed by the power-controlled EDFA.

Regarding claim 6, Sugiya teaches that the at least one injected full light source is injected at a start of the optical data transmission path (reference numeral 16 in Figure 11).

Regarding claim 7, Sugiya teaches that the at least one injected full light source is injected at an end of the optical data transmission path and counter to a direction of transmission (reference numeral 58 in Figure 6).

Regarding claim 8, Sugiya teaches at least one multiplexer (inherent in the WDM nature of the system), arranged at a beginning of the optical data transmission path, for combining the data transmission channels, a demultiplexer (inherent in the WDM nature of the system),

arranged at an end of the optical data transmission path, for separating the data transmission channels; and at least one path section (Figure 11) arranged between the at least one multiplexer and the demultiplexer for determining and compensating spectral tilting of transmitted data signals, the at least one path section including a part (reference numeral 128, 150, 154, 156 in Figure 11) for measuring an overall intensity of the transmitted data signals, at least one controlled full light source (reference numeral 16 in Figure 11) for injecting light power into the at least one path section, and a part (reference numeral 156 in Figure 11) for controlling power of the full light source to compensate power fluctuations of the overall intensity of the transmitted data signals, wherein all the parts of the at least one path section are provided as quick operation control elements for quickly determining and compensating for spectral tilting.

Regarding claim 9, Sugiya teaches that both the part (reference numeral 16 in Figure 11) for measuring the overall intensity of the transmitted data signals and the at least one controlled full light source (reference numeral 12, left side in Figure 11) are arranged at a beginning of the at least one path section.

Regarding claim 11, Sugiya teaches that the delay element is selected from the group consisting of a dispersion-compensating fiber, a fiber with low dispersion, and a fiber doped with a rare earth element (reference numeral 10 in Figure 11).

Regarding claim 13, Sugiya teaches that the frequency of the at least one controlled full light source lies within a transmitted wavelength band of the transmitted data signals (inherent in EDFA amplification), and the at least one controlled full light source has a signal frequency (inherent in the optical signal).

Regarding claim 14, Sugiya teaches that the at least one path section includes frequency-dependent filters (reference numeral 131, 133, 135, 137 in Figure 11; reference numeral 40 in Figure 3) which can be controlled in the at least one path section for compensating the tilting.

Regarding claim 15, Sugiya teaches that the at least one path section includes power-controlled EDFA (reference numeral 130, 132, 134, 136, 138 in Figure 11) for compensating the tilting.

Regarding claim 16, Sugiya teaches that the at least one path section includes at least one element (reference numeral 14, 130 in Figure 11; reference numeral 40 in Figure 3), which is one of a filter and an amplifier, with a respective frequency-dependent transmission characteristic and a gain characteristic, as well as downstream overall intensity meters (reference numeral 146 in Figure 11), including an evaluation unit (reference numeral 152, 154 in Figure 11) for determining the tilting.

Regarding claim 17, Sugiya teaches that the at least one slower control unit comprises a slow EDFA control unit (reference numeral 154 in Figure 11) connected to at least one pump source (reference numeral 16 in Figure 11) of a doped fiber.

Regarding claim 18, Sugiya teaches that the at least one path section includes a slow power-controlled EDFA (reference numeral 130 in Figure 11) connected to at least one pump source of a doped fiber (reference numeral 16 in Figure 11).

Response to Arguments

4. Applicant's arguments with respect the claims have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Agustin Bello whose telephone number is (571) 272-3026. The examiner can normally be reached on M-F 8:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jason Chan can be reached on (571)272-3022. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

AB

AGUSTIN BELLO
PRIMARY EXAMINER